

**What is claimed is:**

1. 1. A method for power management of a smart phone having a power system, a mobile phone system operated in a standby, sleep, connection or off mode, and a PDA system operated in a normal, sleep or off mode, the method comprising steps of:
  6. resetting the smart phone;
  7. searching for network service for the mobile phone system;
  9. operating the mobile phone system in standby mode and the PDA system in normal mode when the network is located and connected to;
  12. switching the mobile phone system from standby mode to connection mode when establishing communication with a remote terminal of the network;
  15. switching the mobile phone system from standby mode to sleep mode when the mobile phone system has been idle for a first period of time;
  18. switching the PDA system from normal mode to sleep mode when the PDA system has been idle for a second period of time; and
  21. implementing a power detection method comprising steps of:
    23. detecting an amount of power of a source in the power system;
    25. switching the mobile phone system to off mode when the detected amount is less than a first threshold; and

28           switching the PDA system to off mode when the  
29           detected amount is less than a second  
30           threshold.

1           2. The method as claimed in claim 1 further  
2 comprising the step of:

3           switching the mobile phone system to sleep mode when  
4           the network fails to be either located or  
5           connected to.

1           3. The method as claimed in claim 2 further  
2 comprising the step of:

3           searching for network service while the mobile phone  
4           system remains in sleep mode for a third period  
5           of time.

1           4. The method as claimed in claim 1 further  
2 comprising the step of:

3           switching the mobile system from connection mode to  
4           standby mode when the communication is  
5           terminated.

1           5. The method as claimed in claim 1, wherein the  
2 mobile phone system is switched to off mode when being  
3 turned off.

1           6. The method as claimed in claim 1, wherein the PDA  
2 system is switched from sleep mode to normal mode when being  
3 awoken.

1           7. The method as claimed in claim 1, wherein the PDA  
2 system is switched to off mode when being turned off.

1       8. The method as claimed in claim 1, wherein the  
2 second period of time is longer than the first period of  
3 time.

1       9. The method as claimed in claim 1, wherein the  
2 first threshold is larger than the second threshold.

1       10. The method as claimed in claim 1, wherein the  
2 power detection method is implemented every fourth period of  
3 time.

1       11. The method as claimed in claim 1, wherein the PDA  
2 system displays a warning message when the mobile phone  
3 system is switched to off mode due to the detected amount of  
4 power less than the first threshold.

1       12. The method as claimed in claim 1, wherein the PDA  
2 system displays a warning message when the PDA system is  
3 switched to off mode due to the detected amount of power  
4 less than the second threshold.

1       13. The method as claimed in claim 1, wherein the  
2 source of the power system is a battery.

1       14. The method as claimed in claim 1 further  
2 comprising steps of:

3           charging the source in the power system; and  
4           switching the mobile phone system from off mode to  
5           standby mode when the amount of power of the  
6           source detected is larger than the first  
7           threshold.

Client Ref.: 910015-0-US  
Our ref: 0746-8152-US/final/Vincent/Steve

1        15. The method as claimed in claim 1 further  
2 comprising steps of:  
3            charging the source in the power system; and  
4            switching the PDA system from off mode to normal mode  
5            when the amount of power of the source detected  
6            is larger than the second threshold.